

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/816,768
Source: IFWO
Date Processed by STIC: 7/25/05

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IFWO

RAW SEQUENCE LISTING

DATE: 07/25/2005

PATENT APPLICATION: US/10/816,768

TIME: 10:49:41

Input Set : A:\stk-075.ST25.txt

Output Set: N:\CRF4\07252005\J816768.raw

3 <110> APPLICANT: Oppermann, Hermann
 4 Tai, Mei-Sheng
 5 McCartney, John
 7 <120> TITLE OF INVENTION: Modified TGF-beta Superfamily Proteins
 9 <130> FILE REFERENCE: STK-075
 11 <140> CURRENT APPLICATION NUMBER: US 10/816,768
 12 <141> CURRENT FILING DATE: 2004-04-02
 14 <160> NUMBER OF SEQ ID NOS: 124
 16 <170> SOFTWARE: PatentIn version 2.0
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 35
 20 <212> TYPE: PRT
 21 <213> ORGANISM: Drosophila melanogaster
 23 <220> FEATURE:
 24 <223> OTHER INFORMATION: 60-A
 26 <400> SEQUENCE: 1
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 32 Glu Asn Val Asn Leu Lys Lys Tyr Arg Asn Met Ile Val Lys Ser Cys
 33 20 25 30
 36 Gly Cys His
 37 35
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 41 <211> LENGTH: 35
 42 <212> TYPE: PRT
 43 <213> ORGANISM: Homo sapiens
 45 <220> FEATURE:
 46 <223> OTHER INFORMATION: BMP-2
 48 <400> SEQUENCE: 2
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 54 Glu Lys Val Val Leu Lys Asn Tyr Gln Asp Met Val Val Glu Gly Cys
 55 20 25 30
 58 Gly Cys Arg
 59 35
 62 <210> SEQ ID NO: 3
 63 <211> LENGTH: 35
 64 <212> TYPE: PRT
 65 <213> ORGANISM: Homo sapiens
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: BMP-3
 70 <400> SEQUENCE: 3
 72 Val Pro Glu Lys Met Ser Ser Leu Ser Ile Leu Phe Phe Asp Glu Asn

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76 Lys Asn Val Val Leu Lys Val Tyr Pro Asn Met Thr Val Glu Ser Cys
77          20          25          30
80 Ala Cys Arg
81          35
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85 <211> LENGTH: 35
86 <212> TYPE: PRT
87 <213> ORGANISM: Homo sapiens
89 <220> FEATURE:
90 <223> OTHER INFORMATION: BMP-4
92 <400> SEQUENCE: 4
94 Val Pro Thr Glu Leu Ser Ala Ile Ser Met Leu Tyr Leu Asp Glu Tyr
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99          20          25          30
102 Gly Cys Arg
103          35
106 <210> SEQ ID NO: 5
107 <211> LENGTH: 35
108 <212> TYPE: PRT
109 <213> ORGANISM: Homo sapiens
111 <220> FEATURE:
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114 <400> SEQUENCE: 5
116 Ala Pro Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr Phe Asp Asp Ser
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124 Gly Cys His
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131 <213> ORGANISM: Homo sapiens
133 <220> FEATURE:
134 <223> OTHER INFORMATION: BMP-6
136 <400> SEQUENCE: 6
138 Ala Pro Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr Phe Asp Asp Asn
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143          20          25          30
146 Gly Cys His
147          35
150 <210> SEQ ID NO: 7
151 <211> LENGTH: 36
152 <212> TYPE: PRT
153 <213> ORGANISM: Homo sapiens
155 <220> FEATURE:

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156 <223> OTHER INFORMATION: BMP-9

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168 Cys Gly Cys Arg

169 35

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174 <212> TYPE: PRT

175 <213> ORGANISM: Homo sapiens

177 <220> FEATURE:

178 <223> OTHER INFORMATION: BMP-10

180 <400> SEQUENCE: 8

182 Val Pro Thr Lys Leu Glu Pro Ile Ser Ile Leu Tyr Leu Asp Lys Gly

183 1 5 10 15

186 Val Val Thr Tyr Lys Phe Lys Tyr Glu Gly Met Ala Val Ser Glu Cys

187 20 25 30

190 Gly Cys Arg

191 35

194 <210> SEQ ID NO: 9

195 <211> LENGTH: 35

196 <212> TYPE: PRT

197 <213> ORGANISM: Homo sapiens

199 <220> FEATURE:

200 <223> OTHER INFORMATION: BMP-11

202 <400> SEQUENCE: 9

204 Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr Phe Asn Asp Lys

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208 Gln Gln Ile Ile Tyr Gly Lys Ile Pro Gly Met Val Val Asp Arg Cys

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213 35

216 <210> SEQ ID NO: 10

217 <211> LENGTH: 35

218 <212> TYPE: PRT

219 <213> ORGANISM: Bos taurus

221 <220> FEATURE:

222 <223> OTHER INFORMATION: CDMP-2

224 <400> SEQUENCE: 10

226 Val Pro Thr Lys Leu Thr Pro Ile Ser Ile Leu Tyr Ile Asp Ala Gly

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230 Asn Asn Val Val Tyr Asn Glu Tyr Glu Glu Met Val Val Glu Ser Cys

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234 Gly Cys Arg

235 35

238 <210> SEQ ID NO: 11

239 <211> LENGTH: 36

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240 <212> TYPE: PRT
241 <213> ORGANISM: Gallus gallus
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Dorsalin
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253          20          25          30
256 Cys Gly Cys Arg
257          35
260 <210> SEQ ID NO: 12
261 <211> LENGTH: 35
262 <212> TYPE: PRT
263 <213> ORGANISM: Drosophila melanogaster
265 <220> FEATURE:
266 <223> OTHER INFORMATION: DPP
268 <400> SEQUENCE: 12
270 Val Pro Thr Gln Leu Asp Ser Val Ala Met Leu Tyr Leu Asn Asp Gln
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275          20          25          30
278 Gly Cys Arg
279          35
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283 <211> LENGTH: 35
284 <212> TYPE: PRT
285 <213> ORGANISM: Mus musculus
287 <220> FEATURE:
288 <223> OTHER INFORMATION: GDF-1
290 <400> SEQUENCE: 13
292 Val Pro Glu Arg Leu Ser Pro Ile Ser Val Leu Phe Phe Asp Asn Glu
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296 Asp Asn Val Val Leu Arg His Tyr Glu Asp Met Val Val Asp Glu Cys
297          20          25          30
300 Gly Cys Arg
301          35
304 <210> SEQ ID NO: 14
305 <211> LENGTH: 35
306 <212> TYPE: PRT
307 <213> ORGANISM: Mus musculus
309 <220> FEATURE:
310 <223> OTHER INFORMATION: GDF-3
312 <400> SEQUENCE: 14
314 Val Pro Thr Lys Leu Ser Pro Ile Ser Met Leu Tyr Gln Asp Ser Asp
315 1          5          10          15
318 Lys Asn Val Ile Leu Arg His Tyr Glu Asp Met Val Val Asp Glu Cys
319          20          25          30
322 Gly Cys Gly

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Input Set : A:\stk-075.ST25.txt

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323          35
326 <210> SEQ ID NO: 15
327 <211> LENGTH: 35
328 <212> TYPE: PRT
329 <213> ORGANISM: Homo sapiens
331 <220> FEATURE:
332 <223> OTHER INFORMATION: GDF-5
334 <400> SEQUENCE: 15
336 Val Pro Thr Arg Leu Ser Pro Ile Ser Ile Leu Phe Ile Asp Ser Ala
337 1          5          10          15
340 Asn Asn Val Val Tyr Lys Gln Tyr Glu Asp Met Val Val Glu Ser Cys
341          20          25          30
344 Gly Cys Arg
345          35
348 <210> SEQ ID NO: 16
349 <211> LENGTH: 35
350 <212> TYPE: PRT
351 <213> ORGANISM: Mus musculus
353 <220> FEATURE:
354 <223> OTHER INFORMATION: GDF-6
356 <400> SEQUENCE: 16
358 Val Pro Thr Lys Leu Thr Pro Ile Ser Ile Leu Tyr Ile Asp Ala Gly
359 1          5          10          15
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363          20          25          30
366 Gly Cys Arg
367          35
370 <210> SEQ ID NO: 17
371 <211> LENGTH: 35
372 <212> TYPE: PRT
373 <213> ORGANISM: Mus musculus
375 <220> FEATURE:
376 <223> OTHER INFORMATION: GDF-7
378 <400> SEQUENCE: 17
380 Val Pro Ala Arg Leu Ser Pro Ile Ser Ile Leu Tyr Ile Asp Ala Ala
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384 Asn Asn Val Val Tyr Lys Gln Tyr Glu Asp Met Val Val Glu Ala Cys
385          20          25          30
388 Gly Cys Arg
389          35
392 <210> SEQ ID NO: 18
393 <211> LENGTH: 35
394 <212> TYPE: PRT
395 <213> ORGANISM: Mus musculus
397 <220> FEATURE:
398 <223> OTHER INFORMATION: GDF-9
400 <400> SEQUENCE: 18
402 Val Pro Gly Lys Tyr Ser Pro Leu Ser Val Leu Thr Ile Glu Pro Asp
403 1          5          10          15

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/816,768

DATE: 07/25/2005
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Input Set : A:\stk-075.ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:64; Xaa Pos. 12,26,31,33,37,40,44,46,49,53,54,57,61,68,73,75,81,82,91
Seq#:64; Xaa Pos. 93
Seq#:65; Xaa Pos. 2,3,4,5,9,11,13,16,23,26,28,31,33,35,39,40,41,42,44,50,55
Seq#:65; Xaa Pos. 56,57,58,59,60,61,62,63,66,69,72,74,76,78,81,83,84,85,86
Seq#:65; Xaa Pos. 87,89,91,92,94,95,97,99,100,104
Seq#:66; Xaa Pos. 2,3,4,5,6,7,8,9,11,12,13,14,16,17,19,20,23,24,25,26,27,28
Seq#:66; Xaa Pos. 29,31,33,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50
Seq#:66; Xaa Pos. 51,52,53,54,55,56,57,58,59,60,61,62,63,64,66,67,68,69,70
Seq#:66; Xaa Pos. 71,75,76,77,80,82,84,85,86,87,88,89,90,91,92,93,94,95,100
Seq#:66; Xaa Pos. 101,102,103,105,107
Seq#:67; Xaa Pos. 2,3,4,5,6,7,8,9,11,12,13,16,17,20,21,23,24,25,26,27,28,31
Seq#:67; Xaa Pos. 33,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52
Seq#:67; Xaa Pos. 53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,72,73
Seq#:67; Xaa Pos. 74,76,77,78,79,80,81,82,83,84,85,86,87,89,90,91,92,93,94
Seq#:67; Xaa Pos. 95,96,97,98,99,101,102,103,104,105,107,109

VERIFICATION SUMMARY

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Input Set : A:\stk-075.ST25.txt

Output Set: N:\CRF4\07252005\J816768.raw

L:2101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0
M:341 Repeated in SeqNo=64
L:2323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0
M:341 Repeated in SeqNo=65
L:2591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0
M:341 Repeated in SeqNo=66
L:2867 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:0
M:341 Repeated in SeqNo=67